Application No.: 10/776,664
Office Action Dated: July 18, 2006

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (Currently Amended): A method for handling a large data object in a computer system, said method comprising creating a handling structure representing comprising a reference to locate the large data object and information to return an interface to provide access to the large data object, wherein said handling structure can be processed by said computer system, via functions, operations, and so forth available for a small data object, with which said large data object could not be so processed.

Claim 2 (Original): The method of claim 1 wherein a first handling structure pointing to a first large data object is virtually copied by the creation of a second handling structure that points to the same first large data object provided that the first handling structure and the second handling structure do not write a change to said first large data object.

Claim 3 (Original): The method of claim 2 wherein, if said first handling structure must write a change to said first large data object, said first large data object is copied to a second large data object and said second handling structure is pointed to said second large data object prior to the first handling structure writing the change to the first large data object.

Claim 4 (Original): The method of claim 2 wherein, if said second handling structure must write a change to said first large data object, said first large data object is copied to a second large data object and said second handling structure is pointed to said second large data object, and then said second handling structure will write the change to the second large data object.

Claim 5 (Currently Amended): The method of claim 1 wherein a data object having a type from among the group of types comprising text, ntext, and image data types (or their equivalents) is converted into a large data object with a corresponding handling structure.

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Claim 6 (Currently Amended): The method of claim [[5]] 1 wherein a data object [[of]] having a type from among the group of types comprising text, ntext, [[or]] and image data type (or an equivalent data type) is converted into a data object [[of]] having a type from among the group of types comprising varchar(MAX), nvarchar(MAX), or varbinary(MAX) (or an equivalent data type) respectively wherein varchar(MAX), nvarchar(MAX), and varbinary(MAX) comprise a handling structure and the MAX corresponds to a predetermined maximum size value.

Claim 7 (Original): The method of claim 1 wherein said handling structure corresponds to a small value data object, and said small value data object is stored entirely within the said handling structure.

Claim 8 (Original): The method of claim 1 further comprising a delete operation for said handling structure, wherein if said handling structure is of a first type, said handling structure and a corresponding large data object are both deleted, and wherein if said handling structure is of a second type, only said handling structure, and not said corresponding large data object, is deleted.

Claim 9 (Original): The method of claim 1 wherein said handling structure has a lifetime, and said handling structure comprising a field having a value corresponding to said lifetime.

Claim 10 (Original): The method of claim 1 wherein said handling structure is created by a handling structure factory in response to a need for a handling structure.

Claim 11 (Currently Amended): A system for handling a large data object in a computer system, said method comprising a subsystem for creating a handling structure representing comprising a reference to locate the large data object and information to return an interface to provide access to the large data object, wherein said handling structure can be processed by said computer system, via functions, operations, and so forth available for a small data object, with which said large data object could not be so processed.

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Claim 12 (Original): The system of claim 11 wherein a first handling structure pointing to a first large data object is virtually copied by the creation of a second handling structure that points to the same first large data object provided that the first handling structure and the second handling structure do not write a change to said first large data object.

Claim 13 (Original): The system of claim 12 wherein, if said first handling structure must write a change to said first large data object, said first large data object is copied to a second large data object and said second handling structure is pointed to said second large data object prior to the first handling structure writing the change to the first large data object.

Claim 14 (Original): The system of claim 12 wherein, if said second handling structure must write a change to said first large data object, said first large data object is copied to a second large data object and said second handling structure is pointed to said second large data object, and then said second handling structure will write the change to the second large data object.

Claim 15 (Currently Amended): The system of claim 11 wherein a data object having a type from among the group of types comprising text, ntext, and image data types (or their equivalents) is converted into a large data object with a corresponding handling structure.

Claim 16 (Currently Amended): The system of claim [[15]] 11 wherein a data object [[of]] having a type from among the group of types comprising text, ntext, [[or]] and image data type (or an equivalent data type) is converted into a data object [[of]] having a type from among the group of types comprising varchar(MAX), nvarchar(MAX), [[or]] and varbinary(MAX) (or an equivalent data type) respectively wherein varchar(MAX), nvarchar(MAX), and varbinary(MAX) comprise a handling structure and the MAX corresponds to a predetermined maximum size value.

Claim 17 (Original): The system of claim 11 wherein said handling structure corresponds to a small value data object, and said small value data object is stored entirely within the said handling structure.

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Claim 18 (Original): The system of claim 11 further comprising a delete operation for said handling structure, wherein if said handling structure is of a first type, said handling structure and a corresponding large data object are both deleted, and wherein if said handling structure is of a second type, only said handling structure, and not said corresponding large data object, is deleted.

Claim 19 (Original): The system of claim 11 wherein said handling structure has a lifetime, and said handling structure comprising a field having a value corresponding to said lifetime.

Claim 20 (Original): The system of claim 11 wherein said handling structure is created by a handling structure factory in response to a need for a handling structure.

Claim 21 (Currently Amended): A computer-readable medium comprising computer-readable instructions for handling a large data object in a computer system, said computer-readable instructions comprising instructions for creating a handling structure representing comprising a reference to locate the large data object and information to return an interface to provide access to the large data object, and processing said handling structure with functions, operations, and such other manipulations available for a small data object, with which said large data object could not be so processed.

Claim 22 (Original): The computer-readable instructions of claim 1 further comprising instructions whereby a first handling structure pointing to a first large data object is virtually copied by the creation of a second handling structure that points to the same first large data object provided that the first handling structure and the second handling structure do not write a change to said first large data object.

Claim 23 (Original): The computer-readable instructions of claim 2 further comprising instructions whereby, if said first handling structure must write a change to said first large data object, said first large data object is copied to a second large data object and said second

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handling structure is pointed to said second large data object prior to the first handling structure writing the change to the first large data object.

Claim 24 (Original): The computer-readable instructions of claim 2 further comprising instructions whereby, if said second handling structure must write a change to said first large data object, said first large data object is copied to a second large data object and said second handling structure is pointed to said second large data object, and then said second handling structure will write the change to the second large data object.

Claim 25 (Currently Amended): The computer-readable instructions of claim 1 further comprising instructions whereby a data object having a type from among the group of types comprising text, ntext, and image data types (or their equivalents) is converted into a large data object with a corresponding handling structure.

Claim 26 (Currently Amended): The computer-readable instructions of claim [[5]] 21 further comprising instructions whereby a data object [[of]] having a type from among the group of types comprising text, ntext, [[or]] and image data type (or an equivalent data type) is converted into a data object [[of]] having a type from among the group of types comprising varchar(MAX), nvarchar(MAX), [[or]] and varbinary(MAX) (or an equivalent data type) respectively, said varchar(MAX), nvarchar(MAX), and varbinary(MAX) types comprising a handling structure type, and a MAX value corresponds to a predetermined maximum size value.

Claim 27 (Original): The computer-readable instructions of claim 1 further comprising instructions whereby, if said handling structure corresponds to a small value data object, said small value data object is stored entirely within the said handling structure.

Claim 28 (Original): The computer-readable instructions of claim 1 further comprising instructions for a delete operation for said handling structure, said delete operation comprising instructions whereby if said handling structure is of a first type, said handling structure and a corresponding large data object are both deleted, and further comprising

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instructions whereby if said handling structure is of a second type, only said handling structure, and not said corresponding large data object, is deleted.

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Claim 29 (Original): The computer-readable instructions of claim 1 further comprising instructions whereby said handling structure has a lifetime, and said handling structure comprising a field having a value corresponding to said lifetime.

Claim 30 (Original): The computer-readable instructions of claim 1 further comprising instructions whereby said handling structure is created by a handling structure factory in response to a need for a handling structure.